



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,315	06/21/2005	David A Eves	A/08 730USA	1627
21127 7590 11/17/2009 RISSMAN HENDRICKS & OLIVERIO, LLP 100 Cambridge Street Suite 2101 BOSTON, MA 02114			EXAMINER SHAH, PARAS D	
			ART UNIT 2626	PAPER NUMBER
			NOTIFICATION DATE 11/17/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mbien-aime@rhoiplaw.com
cjoseph@rhoiplaw.com
info@rhoiplaw.com

Office Action Summary	Application No. 10/540,315	Applicant(s) EVES ET AL.	
	Examiner PARAS SHAH	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to the Amendments and Arguments filed on 06/29/2009. Claims 1-22 are pending and have been examined. The Applicants' amendment and remarks have been carefully considered, but they do not place the claims in condition for allowance.

2. All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

Response to Amendments and Arguments

3. Applicant's arguments (pages 7-11) filed 06/29/2009 with regard to claims 1-22 have been fully considered and they are not persuasive and with respect to the newly added limitation are moot in view of new grounds for rejection.

With respect to claim 1, the Applicant argues that the Examiner has misinterpreted the claim language as defined in the Specification, for the terminology of dramatic parameters. The Examiner respectfully disagrees with this assertion. The Specification in paragraphs [0010] and [0035] as denoted by the Applicant in the Remarks sections show examples of dramatic parameters such as key tempo and mood. It should be noted that the dramatic parameters to be read in a narrow version must be specifically defined in the Specification. However, this is not the case since in paragraph [0038], the section describes that the dramatic parameters that have been defined are examples and further defines such parameters to be markup language tags as well as other *attributes*, where attributes have not been define by the Specification.

Hence, the usage of pitch information and frequency information as disclosed by Finn in view of Mitton in light of this definition can be interpreted to be dramatic parameters.

Finn in Figure 3A and page 6, paragraphs 3 and 4 such time ordered sequence of pitches are extracted. These pitches are attributes that characterize the signal.

Furthermore, Mitton teaches these pitches are in the form of a table in col. 5, lines 12-22. Hence, the Applicants' arguments are not persuasive.

The newly added limitation of "in tandem with said audio signal" necessitates new grounds for rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5, 7-10, 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn (WO 01/11495) in view of Mitton (US 6,355,869) in view of Niikura et al. (JP 06-068168).

As to claims 1, 17, 21, and 22: Finn discloses augmenting an audio signal (see Figure 1) comprising:

receiving an audio signal (Figure 2, input search criteria steps 20 and 21)

extracting features from said audio signal (see Figure 2 step 22, identify

pitch of successive notes),

generating a time based table of dramatic parameters according to the extracted features (see page 6, 3rd and 4th paragraph, and see Figure 3A, from the cited portion and the figure it can be seen that a time ordered sequence of pitches are extracted), and

obtaining media fragments at least in part in dependence on the table of dramatic parameters (see page 15, line 10-33, comparison between query and database based on similarity) files and wherein the media fragments are unrelated to the audio signal prior to the obtaining act (see page 3, lines 5-7, only a search criteria in input and a target file is retrieved, which is not the same as the audio input above), and

outputting said media fragments (see page 21, lines 21-28, music file output or list displayed to user)

However, Finn does not specifically teach a time-ordered table.

Mitton does teach a time- ordered table (see Col. 5, lines 12-22, where Mitton discusses a pseudo wave file with a series of pitch coefficients for each frame and Figure 33).

It would have been obvious to one skilled in the art at the time the invention was made to modify the audio search as taught by Finn, and use a time-ordered table as taught by Mitton, thus allowing a user to produce a musical score from a recording, as discussed by Mitton (see Col. 1, lines 55-60).

However, Finn in view of Mitton do not specifically teach outputting in tandem with said audio signal.

Niikura does teach the outputting in tandem with said audio signal (see [0010], and [0024], where based on an input speech from user corresponding video and sound information containing the input speech (keyword) is outputted).

It would have been obvious to one skilled in the art at the time the invention was made to modify the audio search as taught by Finn in view of Mitton, and retrieve video as taught by Niikura, thus allowing a user to find images based on sound for easy retrieval (see Niikura, [0008]).

As to claim 2, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches features extracted from said audio signal include tempo (see page 25, lines 2, 15, key and tempo determined from the input and is used in search criteria (see page 23 lines 22-26, used in first pass matching).

As to claim 3, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Mitton does teach generation of a time- ordered table (see Col. 5, lines 12-22, where Mitton discusses a pseudo wave file with a series of pitch coefficients for each frame and Figure 33).

Furthermore, Finn discloses the table of dramatic parameters comprises retrieving a list of dramatic parameters and associated audio features (see page

Art Unit: 2626

11, lines 8-10, features from data are compared with search criteria, where the matching criteria of dramatic parameters is shown in page 25, lines 2 and 15), comparing and matching the extracted features with the retrieved associated audio features (see page 11, lines 8-10, features from data are compared with search criteria), and inserting an entry comprising the dramatic parameter associated with the audio feature (see page 23, lines 21-page 25, lines 16, various criteria are determined in order to determined match, where the determination of the dramatic parameter is the inserting for matching purposes.)

As to claim 5, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches obtaining said media fragments comprises selecting a fragment from a store (see page 11, lines 8-10, music files in database 9 and 10 used), said fragment being stored with an associated dramatic parameter which matches the respective entry in the table of dramatic parameters (see page 25, lines 2, 15, key and tempo determined from the input and is used in search criteria (see page 23 lines 22-26, used in first pass matching) .

As to claim 7, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 5, above.

Furthermore, Finn teaches receiving user input, said user input affecting said obtaining (see page 6, lines 13-18, user inputs a voice or a tune and see page 3, lines 1-8, based on user input a matching music is obtained).

As to claim 8, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Niikura teaches the media fragments being video data. (see [0010], video data)

As to claim 9, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches Furthermore, Finn teaches further comprising storage for storing said media fragments (see page 11, line 9, database 9 or 10).

Furthermore, it would have been obvious to one of ordinary skilled in the art to have stored the audio signal at least temporarily as well in order to perform the extraction of features from the audio signal for comparison (see Finn, page 6, lines 15-19).

As to claim 10, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches wherein said outputting comprises rendering said media fragments and said audio signal (see page 21, lines 26-29, link to the

media fragment is displayed which the user can select to hear. It is obvious that the computer system consists of a built in speaker to hear such results corresponding to the tune of the search query. Hence, the rendering of the audio signal occurs by the rendering of a match that is found similar to the tune that was input.)

As to claim 16, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches wherein combinations of extracted features have associated dramatic parameters (see page 25, line 15 and 16, where the tempo is based on mean note durations in seconds, i.e., the mean of the pitches for a specific duration determines the dramatic parameter).

As to claims 18 and 22, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 17 and 21, above.

Furthermore, Finn teaches further comprising storage for storing said media fragments (see page 11, line 9, database 9 or 10).

Furthermore, Mitton teaches storing the dramatic parameters (see col. 5, lines 22-32,list of event and lines 35 where the MIDI file is created and is obvious it will be stored (see Abstract).

As to claim 19, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 17, above.

Furthermore, Finn teaches wherein said at least one output device comprises display means on which said media fragments are displayed (see page 6, lines 5, monitor 4, and page 21, lines 25-26, user presented with search results.).

As to claim 20, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 17, above.

Furthermore, Finn teaches wherein said at least one output device comprises display means on which said media fragments are displayed (see page 6, lines 5, monitor 4, and page 21, lines 25-26, user presented with search results.).

Furthermore, Mitton teaches the output device responsive to instructions associated with said dramatic parameters (see col. 10, lines 6-9, user can modify the event list).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finn in view of Mitton in view of Niikura as applied to claim 1 above, and further in view of Weare (US 2003/0045954).

As to claim 4, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

However, Finn in view of Mitton in view of Niikura does not teach the parameters being mood, change of pace incidents.

Weare does teach use of parameters mood (see [0095], mood), change of pace (see [0066], flow)) and incidents (see [0066], rhythmic activity)).

It would have been obvious to one skilled in the art at the time the invention was made to modify the audio searching of Finn in view of Mitton in view of Niikura, and use video as taught by Weare, for the classification of media entities according to melodic properties (see Weare [0002]).

6. Claims 6 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn in view of Mitton in view of Niikura as applied to claim 1 above, and further in view of Balnaves (US 6,954,894).

As to claim 6, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

However, Finn in view of Mitton in view of Niikura do not specifically teach generating fragments.

Balnaves teaches generating a fragment (see col. 11, lines 12-29, where the user input is modified to form a fragment depending on template selected, silent movie is chosen).

It would have been obvious to one skilled in the art at the time the invention was made to modify the audio searching of Finn in view of Mitton in

view of Niikura, and use video as taught by Balnaves, for effectively controlling and editing multimedia output (see Balnaves , col. 1, lines 7-11).

As to claim 11, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

Furthermore Finn in view of Mitton in view of Niikura teach dramatic parameter data, matching dramatic parameters to media fragments, and selecting and generating according to dramatic parameter lists.

However, Finn in view of Mitton in view of Niikura do not specifically teach the story template

Balnaves teaches prior to obtaining said media segments, selecting a story template (see col. 8, lines 27-30, user selects template) at least in part in dependence on said table of dramatic parameter (see col. 8, lines 54-60, templates used to evoke action or intent and see Figure 12 and 13, where each type of movie has a specific template), said story template affecting said obtaining of media fragments (see Figure 5, 501 and 508, template and movie player, output of processed data) (e.g. The template chosen affects the output data).

It would have been obvious to one skilled in the art at the time the invention was made to modify the audio searching of Finn in view of Mitton in view of Niikura, and use video as taught by Balnaves, for effectively controlling

and editing multimedia output (see Balnaves , col. 1, lines 7-11).

As to claim 12, Finn in view of Mitton in view of Niikura in view of Balnaves teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches the sue of dramatic parameters (see page 6, 3rd and 4th paragraph, and see Figure 3A, from the cited portion and the figure it can be seen that a time ordered sequence of pitches are extracted)

Furthermore, Balnaves teaches wherein said story template comprises dramatic parameter data related to a narrative story structure (see Figure 12 and Figure 13, each type of template movie selected consists of various parameters.

As to claim 13, Finn in view of Mitton in view of Niikura in view of Balnaves teach all of the limitations as in claim 1, above.

Furthermore, Finn teaches matching the dramatic parameters with the media fragments features (see page 11, lines 8-10, features from data are compared with search criteria, where the matching criteria of dramatic parameters is shown in page 25, lines 2 and 15),

Furthermore, Balnaves teaches using a story template comprises dramatic parameter data related to a narrative story structure (see Figure 12 and Figure 13, each type of template movie selected consists of various parameters.

As to claim 14, Finn in view of Mitton in view of Niikura in view of Balnaves teach all of the limitations as in claim 1, above.

Furthermore, Balnaves teaches wherein the story template for selection is generated according to logical story structure rules and the dramatic parameter list (see Figures 12 and 13, where sample template is shown) (e.g. From the Figure, it is obvious to one skilled in the art that the templates were generated beforehand. Based on movie genre or user preferences related to the genre.)

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finn in view of Mitton in view of Niikura as applied to claim 1 above, and further in view of Williams (US 6,308,154).

As to claim 15, Finn in view of Mitton in view of Niikura teach all of the limitations as in claim 1, above.

However, Finn in view of Mitton in view of Niikura do not specifically teach the use of physical markup language tags.

Williams teaches instruction set of a markup language (see Col. 3, lines 2-8, where Williams discusses attributes are encoded using a markup language and markup indicators).

It would have been obvious to one skilled in the art at the time the invention was made to modify the audio searching as taught by Finn in view of Mitton in view of Niikura, and use instruction set of a markup language as taught

by Williams, thus allowing measurement and encoding of recognized content, as discussed by Williams (see Col. 1, lines 52-57).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kanevsky et al. (US 6,434,520) is cited to disclose indexing and querying of audio archives. Brinkman et al. (US 6,740,803) is cited to disclose multimedia presentation of an audio file for playing a musical instrument.

The NPL document by Lu ("Indexing and Retrieval of Audio: A Survey") is cited to disclose retrieval of audio using speaker characteristics.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARAS SHAH whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-THURS. 7:30a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571)272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626

/P. S./
Examiner, Art Unit 2626

11/06/2009